

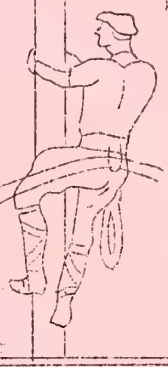
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# THE *REA* LINEMAN



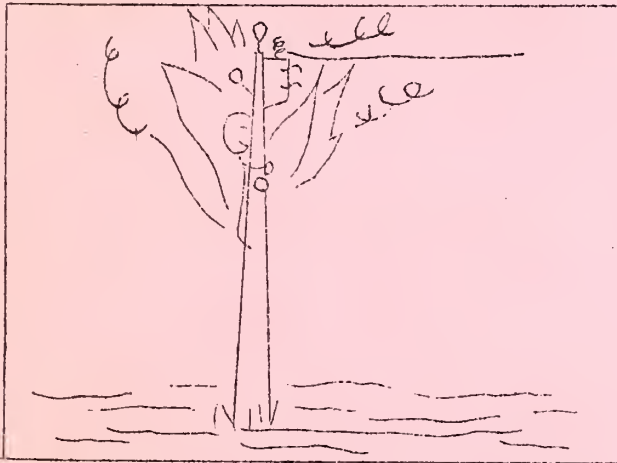
Vol. I, No. 10

December 1941

Washington, D. C.

## NEW MEMBER SAVES LINEMEN TRIP REWARDED BY 7200-VOLT SHAKING

A new member who decided to save the co-op linemen a trip and close his own transformer shut-out recently, received a rude and nearly fatal reminder that electricity is no respecter of amateurs.



According to the publication of the Southeastern Co-op of Harrisburg, Ill., "One of our members moved out of his home, and service was disconnected by pulling the cut-out door open on the transformer. Another tenant moved into the property and, thinking 35 miles too far to have the co-op lineman drive to connect him up, he decided to close the cut-out himself. So he climbed up the pole to the crossarm on which the transformer was mounted, reached up and closed the cut-out with his bare hands. In so doing, he lost his balance and fell across the lead wires to the transformer, thus making a short circuit on the 7200-volt side. The result was

a flash of fire and the man became 'frozen' to the pole.

"His wife, hearing the arc and seeing her husband enveloped in fire and smoke, ran to the base of the pole some 100 feet from the house. By this time the arc was heavy enough to blow the fuse in the cut-out. After some moments, the man regained consciousness and shinnied back down the pole. He went to the house under his own power, and was then taken to a doctor who dressed his burned arm and chest. The co-op office was notified to hook up the new member.

"Commenting on the incident later, the man stated he completed his education in electricity in a few minutes on that pole."

## BOYS RE-FUSE TRANSFORMER LIVE TO TELL THE TALE WON'T DO IT AGAIN

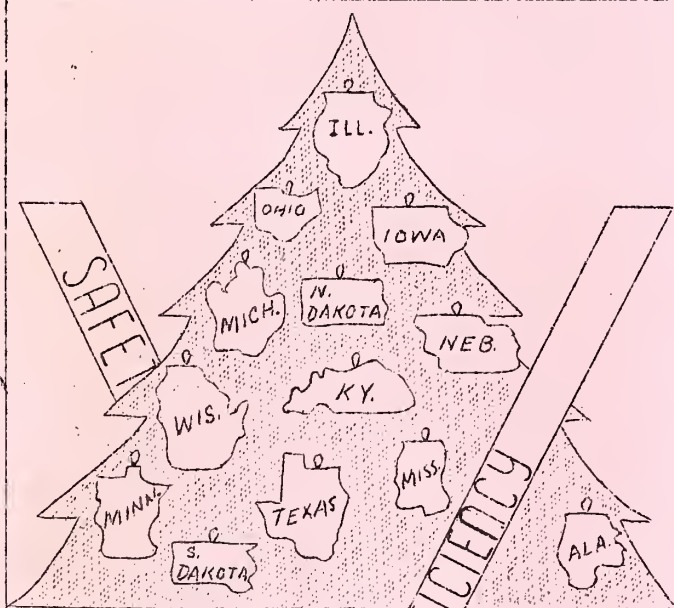
Basil Thompson, supt. of Ala. 30 Autauga, tells how two boys re-fused a transformer and lived to tell the tale. He writes:

"Two boys took a stick, wrapped it with an old innertube of an automobile tire, removed the fuse, soldered it, and placed it back in service.

"This was not only very dangerous to the boys, but to the equipment. I have personally talked to the boys and their father, and have been assured that they will not tamper with the high-line again.

THE REA LINEMAN  
David A. Fleming, Editor

SAFETY + EFFICIENCY = VICTORY  
ACCIDENTS



HANG  
YOUR STATE  
ON THE  
SAFETY  
CHRISTMAS  
TREE  
13 STATE-WIDE  
PROGRAMS ARE  
THERE NOW

NEXT  
YEAR  
THERE  
SHOULD BE

48

FARM AND HOME ACCIDENT LOSSES  
MAKE SAFETY PROGRAM IMPORTANT  
MORE CO-OP MEMBERS PARTICIPATE

By D. A. FLEMING  
REA Safety Director

The importance of the safety and job-training program, which is now gaining momentum, is emphasized by the enormous losses suffered yearly in farm and home accidents and fires.

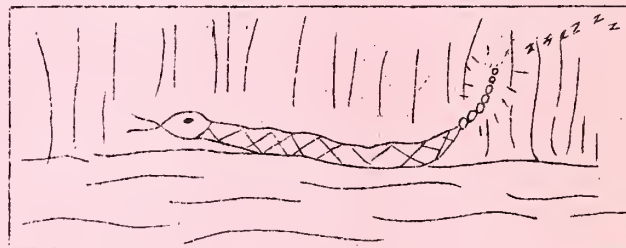
Various estimates of such farm and home losses have been made. One widely quoted estimate places the total

financial loss, including both direct and indirect costs, at \$1,000,000,000 per year. This represents roughly 10 percent of the annual farm income.

The National Safety Council gives 4500 as the number of occupational deaths in agriculture each year. This is many more than occur in any other industry. If we add an estimated 18,000 fatalities resulting from farm fires and non-occupational accidents, 270,000 for non-fatal occupational injuries, and 1,080,000 for other non-fatal injuries the extent of human loss and suffering becomes clear.

Whereas the problem of farm safety will require a long-range program and long-continued efforts to attain full measure of success, the defense emergency makes quick action imperative.

This quick action, it is felt, is being achieved by the REA safety and job-training program.



A RATTLESNAKE will warn you; carbon monoxide won't. During the cold-weather months you will be tempted to keep cars and garages airtight for warmth. The exhaust from all gasoline engines contains deadly carbon monoxide gas. It is odorless, colorless; its action is painless. Protect yourself with plenty of fresh air whenever you work around a gasoline motor.

GET YOUR COPY of "Until the Doctor Comes," useful first-aid booklet prepared by the United States Public Health Service. If you have completed your Red Cross Training Course, send your name and address to Rural Electrification Administration, Washington, D. C., in care of David A. Fleming, Editor, The Lineman.



## CARELESSNESS BURNS LINEMAN CASE HISTORY OF AN ACCIDENT

On various occasions the Editor has been asked to give a detailed description of accidents. Typical of these requests is a letter from Mr. Robert L. Adams, Manager of Oregon 28 Oakland, who writes:

"We appreciate the 'REA Lineman' as an aid in accident prevention; but we believe that we would get more help out of the accident reports, especially when fatalities have occurred, if the accidents were reported a little more in detail and an explanation given of what safety rule was violated or what error was made in construction that contributed to the accident. We do not believe that too much detail can be given to avoid similar accidents."

The REA Lineman will, from time to time, describe accidents and preventive measures which have a general interest. The following is the first of a series, and should not be considered as a criticism of any particular individual or group. Its purpose is solely to help prevent a recurrence of such an accident.

A crew consisting of Mr. A, Foreman; Mr. B, Lineman; Mr. C, Engineer, and Mr. D, Easement Solicitor, were energizing new lines and setting meters. Mr. A, a man with 25 years' experience, had energized one section, connected several transformers, and was about to energize a tap by connecting it to the main line. This particular tap had been disconnected earlier in the day by Mr. E (a lineman from another crew) under the direct supervision of Foreman, Mr. A. The jumper at this location was installed with the permanent end attached to the energized line, and when the live-line clamp was removed it was left dangling in the air. Mr. A. climbed the pole and picked up the live-line clamp apparently to attach it to the hot-stick, not realizing the jumper was connected to the energized line.

The current entered his hand and went to ground thru his foot.

The outstanding factors are:

1. The unsafe practice consisted in attaching by hand an ungrounded live-line clamp to a hot-stick.

Any high-voltage line that is not grounded, or has no grounds visible to the lineman performing the work, is a potential source of injury. These lines may be or become hot due to another workman's inadvertently energizing the line, mistaken identity, crosses with other high voltage lines, feedback from other circuits or improper construction. Should a lineman be required to attach an ungrounded live-line clamp to another conductor, the possibility of this clamp's being energized should be considered FIRST. In addition to considering all possible sources of feed, it is good practice to "feel out" a line with a hot-stick for a "conductive discharge" to determine if the line is de-energized.

2. Rubber gloves were not worn.
3. The jumper was not connected to the ground.

Safety Bulletin 9, "Energizing Procedure to be Followed by Project Lineman," paragraph 3, states in part: "Where the sectionalizing device consists of a live-line clamp, the grounding should be accomplished by disconnecting the live-line clamp from the phase conductor, and connecting it to the primary neutral conductor." The particular jumper in question was not connected to the ground. It may have been too short. If so, when the jumper was removed, this condition should have been called to Foreman A's attention. Mr. A. should inspect Mr. E's work before leaving the job.

4. The permanent end of the jumper was attached to the energized line.

This should have been noticed by the engineer on the original

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(Continued from page 3)

inspection. Mr. A should also have noticed this condition when the jumper was removed earlier in the day under his supervision and later in the day when he attempted to energize the line.

Questions:

Are the jumpers on your system installed so that the clamp is de-energized when disconnected from the feed wire?

What is your practice when connecting live-line clamps?

1. Do you take such a position on the pole that your body is free from all conductors, and where it is IMPOSSIBLE to contact energized primaries EVEN if you should slip, fall or otherwise inadvertently move?
2. Will the length of your hot-stick allow you to take the position described in No. 1?
3. Do you KNOW the clamp is de-energized?
4. Are you POSITIVE?
5. Do you have your rubber gloves on?

The answer must be YES.

NATIONAL SAFETY COUNCIL OFFERS  
VALUABLE SERVICE TO REA CO-OPS.

By P. B. FISCHER

National Safety Council, Membership  
Service

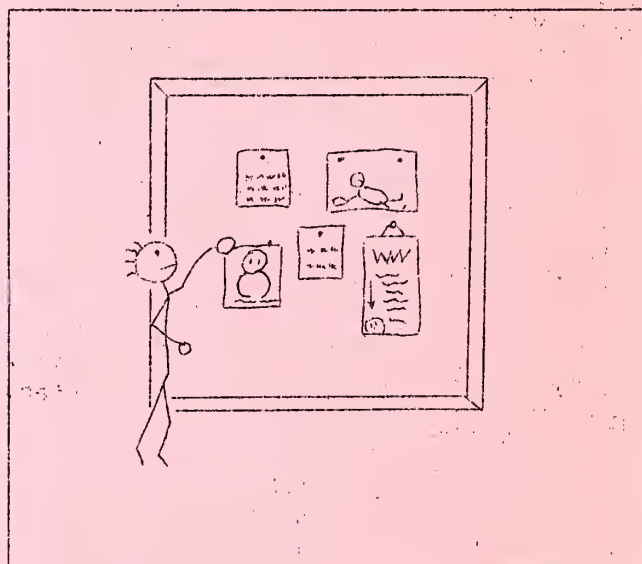
In the last issue of the REA LINEMAN, I pointed out many ways in which REA systems can and should use their membership in the National Safety Council. Here are some additional ideas on that subject.

Posters, supplied by the council, are an effective means of keeping safety continually in the minds of employees. These posters may be displayed in two ways--either all at one time in a centrally located place or one at a time on a bulletin board.

It is generally felt that Safety Instruction Cards can be used most effectively by having a special flap on the REA system's service truck where

they are always carried. In case there is more than one service truck, duplicate sets should be purchased. Some systems feel that safety instruction cards are so important that each operating employee should have a complete set. The cards pertaining to home safety should be available to every lineman and service man. It may be desirable to purchase extra copies of these home-safety cards so they can be left with members of REA co-ops.

The safety problem cannot be solved by the mechanical use of safety materials alone. Additional important factors are safety meetings, safety awards and other forms of recognition.



Membership in the National Safety Council makes available the "tools" for a complete safety program.

The man in charge of each REA system's safety work should always have ideas for putting over safety programs. Council membership makes available to him the vast resources of industry's accident experience to apply to his own problems. Any REA system can write to the National Safety Council, when confronted with a problem, and ask, "What should I do?" Suggestions from the Council will be forthcoming immediately.



## BEST JOB IN . . . "THE WHOLE U.S.A."

The real sparkplugs of the Safety program are men like Joseph C. Kipping of the Monroe County Electric Co-op., Waterloo, Illinois. Mr. Kipping is a lineman because he likes it. Let him tell you, as he did us in a recent letter, why he likes it.

203 W. 3rd St.  
Waterloo, Ill.  
November 22, 1941

Mr. D. A. Fleming  
Washington, D. C.

Dear Sir:

In the November issue of "The REA Lineman"--a most instructive and necessary publication--Mr. L. A. "Slim" Ehmsen, Safety Director for REA in Ohio, remarks that he would not change jobs with anybody in REA. He hasn't got a thing on me, as I'll go even further, and instead of taking in only REA, I'll include the whole U.S.A.

I have a number of reasons, but the first and foremost is that I am not cooped up inside the four walls of a building, or even hemmed in by a few acres. I help take care of over 400 miles of REA lines, and having that much territory really gives one ample room to stretch in without feeling crowded. The only inside work I have is 2 hours a week spent in taking the Red Cross first-aid course, but this is so interesting and so worth while that it seems like only a few minutes.

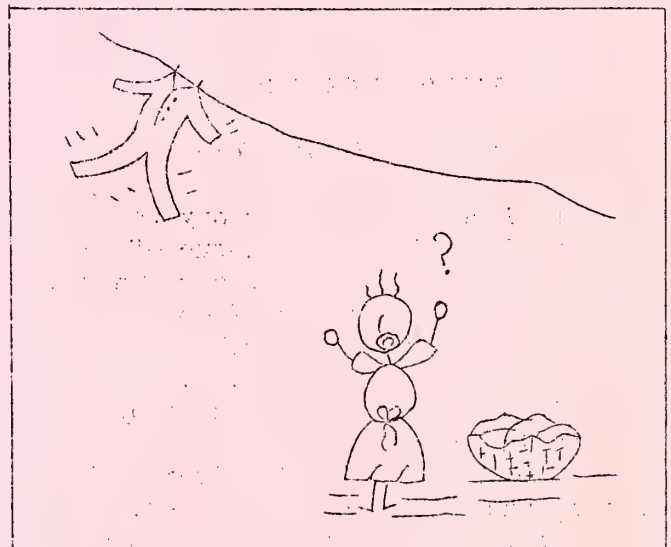
Another thing about this work is the kick you get in playing a part in getting electricity to a new member, and to keep it flowing through the lines to the older, pioneer members of your Cooperative. For the same reason you don't seem to feel the sting of the winter blizzards, nor the driving rain of a summer storm as you would if you were engaged in just another job. For every inconvenient moment you have, you realize

you are creating hours of pleasure and comfort for your fellow man.

And last but not least, isn't there a thrill that money can't buy when, in driving through the countryside, the members of your Cooperative, and also the non-members who someday will belong, wave a friendly greeting as you pass by? Knowing these twelve to fifteen hundred people personally and being ever ready to cooperate with them, thereby furthering the interest of your Cooperative, is a bigger thing than just another job in the opinion of just another lineman.

Respectfully,

S/ Joseph C. Kipping  
Monroe County Electric  
Cooperative



### WRONG CONNECTION BLAMED AS RED FLANNELS FLY HEAVENWARD

Are red flannels dangerous?

The Piqua, O. Co-op isn't so sure, but it points out that linemen sometimes have embarrassing situations to contend with.

It seems that an REA line foreman and his crew of wiretwisters were stringing in wire on a new extension when the wire came loose from the tackle blocks and sagged back. Some distance behind the crew, the wire

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(Continued from page 5)

sagged down over the back yard of the prospective consumer. While the crew was getting ready to pull the wire up again, a lady, mistaking the wire for her clothesline, hung out a suit of red flannel longies to dry. Suddenly, directly in front of the lady's startled eyes, the longies took flight heavenward. The lady was soothed somewhat upon the restoration of her "closest friend;" but, according to the Piqua Co-op Lighter, the line foreman suffered considerable embarrassment at again being forced to slack the line in order to recover the soaring unmentionables.

#### EDITOR'S GRAB BOX

##### It Can't Happen Here

A "Believe it or Not" story was published in the August issue of the REA LINEMAN. It told how a groundman caught a lineman falling from a pole. The story was based on authenticated reports, and it puzzled W. A. Dallman, superintendent of the Clark co-op in Wisconsin. He writes:

"I happen to be an old-timer with hooks, and there are more old-timers like me who agree that accidents never happen that way. I was wondering, if he had his spurs sunk into the pole and received the electric shock, how his hooks broke loose. Even granting that that could happen and he turned head down, how did his safety belt slide down the pole with a twist in it? The twist would tighten the belt and it would be impossible for it to slide. I am willing to demonstrate this, as it has been done many times.

"Then, too, the groundman rushing up after the lineman had started to fall sounds rather odd. Good safety does not allow groundmen to stand directly under the linemen regardless of what he is doing. If Mr. Collins

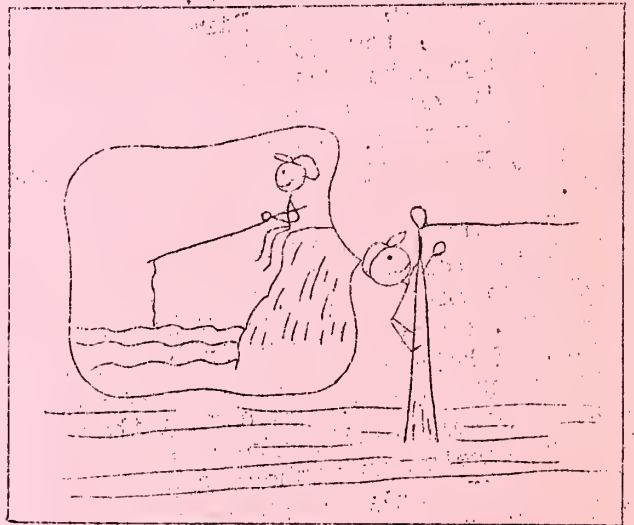
was away from the pole where he should have been, he couldn't have done much catching before the lineman hit the ground."

Dallman's points are well taken. The accident, however, actually happened as described, according to reports received here.

##### "Pay Strict Attention," He Warns

S. N. Jordan, Manager of the Eastern Iowa L. and P. Co-op at Davenport, has issued the following memo to all linemen:

"Compound thoughts cause more accidents than are caused by lack of experience or any other condition.



"As an example: When working close to energized lines, please do not entertain several cherished thoughts concerning things that divert your mind from precautions and danger.

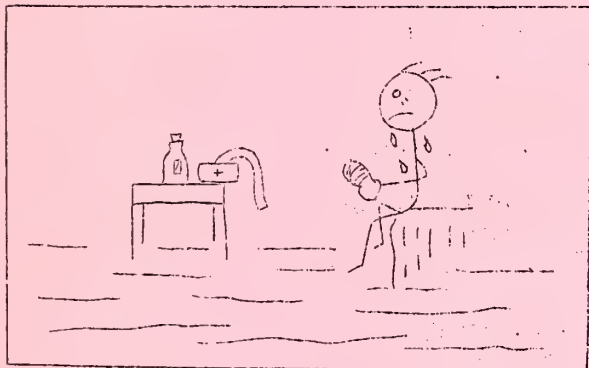
"The difference between the quick and the dead is the ability to pay strict attention."



## Beware of Finger Infections

One out of every five hand or finger injuries involves infection, the Santee-Cooper (S.C.) Safety News points out. Quoting reports of four State Compensation Commissions, Safety News states:

"The average workman thinks nothing about a small scratch on the hand. And so we often wonder if the average



man isn't afraid of the wrong things. We believe that so far as safety is concerned, we should supplant our fears with a wholesome respect for the hazards of everything."

"Everything," in the case of REA systems, includes all tasks from changing a typewriter ribbon to changing a transformer while the current is on.

## A Lesson in Economy

We are flattered by a letter we have meant to answer sooner from F. A. Tannahill, Superintendent of Ill. 2 Wayne. After pointing out that in a recent issue G. Abbott was erroneously listed as a co-op employee, when as a matter of fact, he was a Trucking Company employee, Mr. Tannahill says:

"We get along very nicely with three copies of the REA LINEMAN because we require each employee to read it throughout, sign his name on the margin, and pass it along to a fellow employee. In this way the REA LINEMAN reaches every employee of the system."

## The REA LINEMAN Takes a Bow

Howard Alexander, Superintendent of Mo. 41 Platte, reports that following a safety meeting on that system, the following resolution was adopted:

"We as a group wish to express our appreciation to D. A. Fleming, Safety Director of REA, for his fine efforts in printing and making available to our system the REA LINEMAN."

## MAN-POWER LOSS

These Accidents Were Reported to  
REA During October

### DEAD

#### REA SYSTEM EMPLOYEES

Donald Thompson-- Ga. 70 Mitchell--  
(Lineman of Ga. 42 Toombs, assisting  
on clean-up after storm).  
Emery Scroggin, Lineman--Ala. 21  
Cherokee  
Paul E. Helmich, Groundman--Ill. 46  
Madison  
Hubert Ressler, Employee--Iowa 32  
Butler  
John Botts, Laborer--S.D. 12 Minnehaha

### DEAD

#### NON-REA SYSTEM EMPLOYEES

Wm. P. Dunbar, Mailcarrier--Ill. 38  
McLean  
Ernest Elam, 14-year-old boy--La. 7  
Grant  
John Abel, Farmer--Ore. 16 Malheur

### DISABLED

#### REA SYSTEM EMPLOYEES

N.H. 4 Merrimack--A. LeBlanc, crushed  
vertebra and broken wrist.  
N.C. 34 Anson--F. Hammond, saw cut  
above knee.

(Continued on page 8)

DISABLED

CONTRACTOR (NOT REA) EMPLOYEES

Ainsworth Const. Co., Texas--C. A. Paulson, thorn in finger.  
Day and Zimmermann, Inc., Maryland--J. R. Martin, strained back; E. W. Tatman, muscular cramp; S. L. Merritt, strained back.  
South Carolina--B. E. Thompson, bruised knee.  
Griffin Elec. Co., Kentucky--W. B. Richmond, fractured heel; E. Knight, fractured vertebra and pelvis.  
Little Elec. Co., South Carolina--R. B. Simmons, severe electrical burns.  
Megarry Bros., Minnesota--A. Mayer, dislocated hip and shoulder.  
Mill and Marine Elec. Inc., North Carolina--V. Rowe, cut leg; E. Caton, cut leg.  
Piqua Steel Co., Kentucky--R. Jacobs, dislocated elbow.  
Sandberg & Johnson Const. Co., Texas--R. O. Sanders, infection; T. Mayberry, infection; J. B. Lockhart, thorn in finger; W. Harrison, bruised back.  
Penn. 13 Tioga--F. Gordon, creosote irritation in eye.  
S. C. 26 Darlington--K. Ervin, broken leg.  
N. D. 11 Cass--R. E. Hefty, concussion, laceration, contusion.

S. D. 16 Grant--Axe cut on foot.  
Nebr. 59 Butler--M. Bock, fractured leg.  
Ark. 18 Carroll--L. B. Singleton, sprained knee; C. Hanson, bruised leg and chest.  
Okla. 10 Cleveland--V. M. Brown, hernia.  
Okla. 25 Rogers--W. E. Howard, hands and leg amputated.  
Idaho 11 Kootenai--C. Bottscher, severe electrical burns.

EXCUSE IT PLEASE!

These names were left out of the National Safety Congress issue. They were there too:

F. A. Tannahill  
Manager  
Ill. 2 Wayne  
  
Ray Grigsby  
Manager  
Ill. 32 McDonough  
  
Vernon C. Green  
Manager  
Ill. 28 Champaign  
  
T. M. Brady  
Manager  
Ill. 26 Iroquois

# SAFETY FOR DEFENSE

*Men, Women and Children are  
America's wealth. Manpower is  
more precious now than any  
item in the Defense program.*

SAVE IT

DON'T WASTE IT

TAKE CARE

PROMOTE SAFETY